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February 22, 2007

Chairman Pease & Committee Members Senate Highways & Transportation Committee Capitol Building Helena, MT 59620

RE: SB 516 (Sponsor Jerry Black)

Mr. Chairman & Committee Members:

My name is Tad Dale and I am Vice President of Human Resources for Montana Resources, LLP in Butte, Montana. Montana Resources (MR) operates the lowest ore grade open pit copper and molybdenum mine in the world. Our skilled work force, existing infrastructure, and efficient operating methods allow us to economically compete in the world market. Thank you for allowing me a few minutes to outline Montana Resources' position on Senate Bill 516.

I applaud the idea of searching for new ways to supplement our fuel and energy supplies. The workforce at MR is constantly seeking new ways to operate more efficiently which translates to saving money. We have studied HB 516 with the question in our minds "will the implementation of this legislation benefit our operation?"

Our operation uses diesel in two different applications. One is obvious and that is to power our equipment. The other is specific to a copper/molybdenum flotation circuit. At our present production rates, Montana Resources uses 4,500 gallons of diesel each month as a molybdenum promoter. This is an integral part in the separation process of the copper and molybdenum metals. MR is alarmed at being forced to use a biodiesel blend due to the balance of chemicals and reagents that must be maintained to keep metal recoveries at optimum levels. This is one area where **no** research has been done on the effect of biodiesel in a flotation circuit. One little change can make the difference between being efficient and competitive or losing money in the world market.

Our heavy equipment is powered by predominantly three different diesel engine manufacturers: Caterpillar, Cummins, and Detroit Diesel. An engine in one of our six 240 ton rated haul trucks costs over \$360,000. MR uses approximately 250,000 gallons of #2 diesel fuel each month. If the price per gallon of the biodiesel blend costs 15% over the regular price of diesel (presently \$2.00/gal) this adds \$75,000 per month or \$900,000 per

year to our cost of doing business. Remember, we have to compete in a world market and any added cost has a negative impact on our ability to stay competitive.

Furthermore, there are some areas where we can not make any clear cut decisions on the effect that a blend of biodiesel might have on emission standards, engine life and performance, and fuel efficiency since biodiesel's long term influence on these parameters is not known. All three of our engine manufacturers list precautions if using a biodiesel blend as your fuel.

Some of the problems that could arise are:

- 1) **Cold weather operation**: Indications are that biodiesel has a higher cold filter plugging temperature and thus could cause increased fuel gelling problems even at blended amounts. MR already struggles with cold weather diesel gelling problems and uses a combination of fuel additives, diesel #1 blending, and weather predicting to address these problems. If the cold filter plugging temperature is increased, MR will be forced to burn significantly more diesel #1 blended fuel in the winter months and #1 diesel produces less energy than #2 diesel. This will decrease engine efficiencies and increase diesel consumption in the winter months. This seems to be contrary to the intent to save on fuel consumption.
- 2) **Potential voiding of manufacturers' warranty**: Failures attributed to the use of biodiesel fuel will not be covered by product warranty. Also, any engine performance problem related to biodiesel fuel would not be recognized nor considered the manufacturers' responsibility.
- 3) **Diesel storage and moisture problems**: Biodiesel has poor oxidation stability, which can result in long term storage problems. It is recommended that biodiesel be used within 6 months of its manufacture. Also, microbial growth can result in storage tanks if not used in this time frame. This could be a problem with our bulk storage and less used support equipment.
- 4) **Other potential added costs**: Oil changes may have to be more frequent and engine ratings are not to be changed to compensate for the power loss. Biodiesel provides 5% to 7% less energy per gallon than distillate fuels or the #2 diesel that we are presently using.

Again, MR is in favor of using alternate fuels and improving efficiencies in all aspects of our operation. The incentive to use biodiesel should be driven by the marketplace and not by mandate. Engine manufacturers should be encouraged to develop engines that are specifically designed to burn biodiesel as a blended fuel source or as a stand alone fuel source. Then the warranty, performance, engine life, and emission standard issues are resolved.

This bill forces the end user such as MR to introduce a biodiesel fuel into our heavy industrial engines which were not designed or rated to use such fuels.

Also, the addition of biodiesel could have a devastating effect on how we recover the copper and molybdenum metals that are the reason for us being in business in the first place.

Because of the workplace realities and the impact on our ability to control our operating costs, MR must oppose this bill even though the goal of using alternate fuel sources is a worthy goal.

Thank you for the opportunity to express the views of Montana Resources on this Senate Bill.

Sincerely,

Tad Dale, P.E.

V.P. Human Resources

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